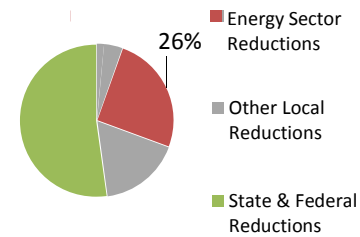


2014 CAP UPDATE - Energy Sector Planning Matrix

Example Strategies	Jurisdiction
Retrofit 15% of existing buildings	San Diego County
Reduce energy use by 15% in 20% of residential housing units by 2020 (50% of units by 2035)	San Diego
Reduce community's energy load by 1% per year and peak load demand by 10% overall	Riverside
Reduce energy use and greenhouse gas emissions in existing buildings by 20% over 2007 levels	Vancouver
Reduce energy use citywide in existing buildings by 1 million kWh annually and increase solar capacity by 500 kW annually	Santa Monica

Greenhouse Gas Emission Reductions



Assuming all sectors reduce equally, the Energy Sector's 2020 reduction target would be:

97,493 MT CO₂e

To meet this goal, the community would need to reduce energy consumption by:

**1,288,716 MMBtu/yr or
15 kBtu/day per capita reduction or
20% per capita reduction**

For reference:

- 1 MMBtu = 293 kWh
- 1 MMBtu = 10 thm
- Average SDG&E customer uses 500 kWh & 33 therms per month

Example Actions		Emission Reductions (MT Co2e)	City Jurisdiction?	Fiscal Impact?	Short Time Frame?	Assumptions
Quantified Measures						
1. Efficiency Education [Current Action]	Create or enhance audience-specific (ex. DIY, Boomers, & Millennials) energy efficiency education & messaging (potential topics include loading order, comfort, financing, and permit benefits)	1,936	Yes	Yes	Yes	Engage 5% of households (~3,750) annually with EE information
2. EE Upgrades for Low-Income Households	Provide rebates or direct install services for energy-saving upgrades in low-income households	478	Yes	Yes	Yes	Retrofit 1,000 homes each year (average saving of 271 kWh & 72 therm)
3. Commercial Retro-Commissioning	Launch a retro-commissioning incentive (monetary) program for commercial buildings	1,084	Yes	No	Yes	Reach 20% of total commercial building sq ft
4. Voluntary Green Building Standard [Current Action]	Expand voluntary green building standard program in new residential & non-residential buildings	11	Yes	Yes	Yes	Recruit 10% of new construction to exceed 2013 Title 24 by 15% (zero participants to date)
5. Commercial Energy Benchmarking	Require commercial building energy benchmarking and disclosure to public	76	Yes	Yes	Yes	Benchmark 20% of eligible commercial space (1,350,000 sqft per year)

6. Energy Retrofit Ordinances (RECO/CECO)	Develop a residential & commercial energy conservation ordinance requiring upgrades at a point in time (not at time of sale)	8,799	Yes	Yes	Yes	Retrofit 10% of residential SF (by Sqf) and 15% of MF and reduce energy consumption by 30% and 20%, respectively. Retrofit 10% of commercial space and reduce energy consumption by 30%
7. EE Reach Code	Pass "reach" codes for all new construction (& major alteration) projects requiring energy efficiency levels beyond Title-24 state standards	51	Yes	Yes	Yes	Require all new developments to exceed 2013 T24 by 10%
8. Enhanced EE/RE for Large Projects	Require energy efficiency and onsite energy generation Solar Hot Water systems in large developments (new & existing)	2,151	Yes	Yes	Yes	Install SHW systems on 75% of new homes, 5% of existing homes and 5% of all commercial hot water users (quantification duplicative of measure #9 and can support measure #6, #7 & #8)
9. Renewable Energy on New Construction	Require renewable energy on new homes and businesses [Combined w/ #10 below]	NA	Yes	Yes	Yes	Install SHW systems on 75% of new homes, 5% of existing homes and 5% of all commercial hot water users (quantification duplicative of measure #8 and can support measure #6)
10. Zero-Net/Renewable Energy	Adopt a mandatory Zero-Net Energy or Green Building goal (met through Solar PV) for new construction	9,259	Yes	Yes	Yes	Install 40 MW (20MW residential and 20MW commercial)
11. 100% Green Energy	Provide higher percentage of grid-delivered renewable energy through Community Choice Aggregation (or other mechanism)	51,095	Yes	Yes	Yes	Enroll 80% of population in 50% renewable energy and 10% in 100% renewable energy
12. Urban Forest	Plant shade trees to save energy and address urban heat island effect	7,278	Yes	No	Yes	Expand Urban Tree Canopy Cover from 10% to 15%
13. Cool Roof [Current Action]	Develop standards for incorporating "cool roofs" into building codes for new construction in CZ 7 & 10	75	Yes	Yes	Yes	Current action is limited to all new residential buildings in Climate Zone 10
Support Measures - Energy Efficiency						
1 [Current Action]	Require free energy & water evaluations for businesses thru business licensing	NA	Yes	Yes	Yes	~600 evaluations annually
2 [Current Action]	Provide free energy & water evaluations for homes	NA	Yes	Yes	Yes	~150 evaluations annually
3 [Current Action]	Provide energy efficiency financing for property-owners through a PACE program	NA	Yes	Yes	Yes	Applications currently being accepted and financing should occur in July
4 [Current Action]	Provide 0%-interest loans to help low/moderate-income residents improve energy efficiency and reduce energy costs	NA	Yes	Yes	Yes	Approximately 2 or 3 loans issued per year
5 [Current Action]	Provide free technical assistance to developers and permit applicants on energy efficiency technologies	NA	Yes	Yes	Yes	-----
6 [Current Action]	Support local energy efficiency & renewable energy manufacturing	NA	Yes	Yes	Yes	Clean Tech sector included in current Economic Development study & recruitment efforts
7	Partner with Public Schools to identify energy efficiency opportunities	NA	Yes	Yes	Yes	-----

8	Leverage programs aimed at increasing health and safety of homes to increase participation in energy-saving programs	NA	Yes	Yes	Yes	-----
9	Develop a policy for minimum efficiency standards in affordable housing program	NA	Yes	Yes	Yes	-----
10	Support programs for low- and moderate-income families to increase energy efficiency	NA	Yes	Yes	Yes	-----
11	Incentivize (non-monetary) and assist rental housing owners/renters in making energy efficiency upgrades	NA	Yes	Yes	Yes	-----
12	Require building energy audits for multi-family buildings	NA	Yes	Yes	Yes	-----
13	Require energy performance ratings for all homes at a point in time (not at time of sale) when sold or transferred-	NA	Yes	Yes	Yes	-----
14	Link energy efficiency audits to solar permits	NA	Yes	Yes	Yes	-----
15	Streamline permit process (provide over the counter permits) and minimize fees for energy-saving upgrades	NA	Yes	No*	Yes	*Fee reductions would cause fiscal impact to City
16	Increase enforcement of building energy codes to reduce the rate of noncompliance	NA	Yes	Yes	Yes	-----
17	Bundle energy efficiency permits to help expedite review and promote whole-home retrofits	NA	Yes	Yes	Yes	-----
18	Work with utilities through franchise agreements to provide local energy efficiency programming	NA	Yes	Yes	Yes	-----
19	Work with NGOs and businesses to make it easier to access technical assistance and financing for retrofits	NA	Yes	Yes	Yes	-----
20	Facilitate the use of "Green Leases" for commercial buildings that address energy data/disclosure and split incentive issues	NA	Yes	Yes	Yes	-----
21	Host an annual Energy Reduction Challenge ("Kilowatt Crackdown") or similar campaign for commercial buildings	NA	Yes	Yes	Yes	-----
22	Create incentives (non-monetary) for businesses to transition janitorial work to "Day Shift Cleaning"	NA	Yes	Yes	Yes	-----
23	Develop incentives (non-monetary) for energy efficiency improvements and disincentives for energy waste	NA	Yes	Yes	Yes	-----
24	Sponsor an Appliance Trade-In incentive program	NA	Yes	No	Yes	-----
25	Encourage non-government entities to offer energy efficiency outreach	NA	Yes	Yes	Yes	-----

Support Measures - Renewable Energy

1 [Current Action]	Pre-wiring and pre-plumbing standards for Solar PV & Solar Hot Water	NA	Yes	Yes	Yes	Over 1,500 "solar ready" homes built
2 [Current Action]	Establish flat or reduced permit fees for Solar PV systems	NA	Yes	Yes	Yes	Residential Solar PV permits set at \$250 (flat fee)
3 [Current Action]	Provide renewable energy financing for property-owners through a PACE program	NA	Yes	Yes	Yes	Applications currently being accepted and financing should occur in July
4 [Current Action]	Provide free technical assistance to developers and permit applicants on renewable energy technologies	NA	Yes	Yes	Yes	-----
5	Lobby local utilities and state regulators to increase the use of renewable energy and cogeneration sources	NA	Yes	Yes	Yes	-----
6	Work with utilities to allow and help site community solar installations	NA	Yes	Yes	Yes	-----
7	Establish a City tax credit or rebate for installing Solar PV panels	NA	Yes	No	Yes	-----
8	Leverage City resources to promote renewable energy in the private sector	NA	Yes	Yes	Yes	-----
9	Explore facilitation of bulk purchases of Solar PV equipment for businesses/residents (specifically shopping centers & HOAs)	NA	Yes	Yes	Yes	-----
10	Work with utilities to provide an option for a higher percentage of grid-delivered renewable energy (i.e. Renewable Energy Credit) for community members	NA	Yes	Yes	Yes	-----
11	Create a Renewable Energy Credit database for organizations looking to contribute to renewable energy	NA	Yes	Yes	Yes	-----
12	Partner with landfills/waste haulers to use biogas to generate electricity, produce biofuels, or otherwise offset fossil fuels	NA	Yes	Yes	Yes	-----
13	Allow contracts for power imports from coal-fired plants to expire	NA	No	Yes	Yes	-----

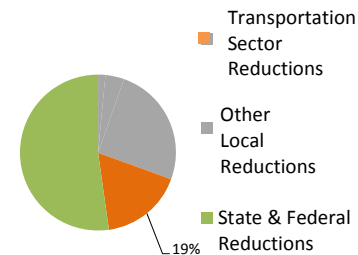
Initial Selection Criteria Definitions

City Jurisdiction?	This selection criteria evaluates whether a potential action is under the City's jurisdiction (i.e. can be influenced by its programs, policies, and codes).
Fiscal Impact?	This selection criteria evaluates whether a potential action would create a negative fiscal impact to the City's General Fund.
Short Time Frame?	This selection criteria evaluates whether the action could be implemented soon enough to positively impact the City's 2020 GHG emission levels.

2014 CAP UPDATE - Transportation Sector Planning Matrix

Example Strategies	Jurisdiction
2% decrease in VMT & 50% increase in bicycle and pedestrian facilities	San Diego County
Achieve mass transit mode share of 12% in 2020 & 25% in 2035 in High Priority Transit Areas	San Diego
Decrease vehicle miles traveled 15% by 2015 based on the 2009 baseline	Riverside
Make the majority (over 50%) of trips by foot, bicycle, and public transit & reduce average distance driven per resident by 20%	Vancouver
Reduce daily vehicle miles traveled within the city by 13,000 & increase biking/walking mode share to 15%	Santa Monica

Greenhouse Gas Emission Reductions



Assuming all sectors reduce equally, the Transportation Sector's 2020 reduction target would be:

66,570 MT

To meet this goal, the community would need to reduce energy consumption by:

**138 Million VMT/yr or
1.5 VMT/day per capita reduction or
19% per capita reduction**

For reference:

- 2012 VMT - 9 miles per person per day

Example Actions		Emission Reductions (MT Co2e)	City Jurisdiction?	Fiscal Impact?	Short Time Frame?	Assumptions
Quantified Measures						
1. Public Transit Ridership Smart-Growth-Around-Trolley Stations [Current Action]	Leverage areas around trolley stations and other transit nodes to increase public transit use implement "Smart-Growth" development projects	14,190	Yes	Yes	Yes	Reach 6.9% commuter ridership level (currently 5.7%)
2. Complete Streets Bicycle & Pedestrian Master Plans [Current Action]	Implement "Complete Streets" policies through Continue to implement and improve the Bicycle and Pedestrian Master Plans and Capital Improvement Projects	2,383	Yes	Yes	Yes	Increase Bicycle Lane Miles/Square Mile ratio to 4 (currently 1.1) and install 5 roundabouts (quantification duplicative of measure #5)
3. Higher Density Zoning in Smart Growth Areas	Encourage and maintain Smart Growth areas zoning that allow for greater commercial and residential density (includes bicycle & transit benefits)	291	Yes	Yes	Yes	Increase density by 13% (compared to 2010) (Density increase reflects current adopted GP densities)
4. Mixed-Use & Complete Neighborhoods	Encourage and support mixed-use development in appropriate locations that provides convenient access to services (i.e. "Complete Neighborhood" communities)	12,141	Yes	Yes	Yes	Reduce average commute length by 1 mile (reduce VMT by 15 million)

5. Complete Streets	Implement "Complete Streets" policies and projects to encourage walking and bicycling [Combined w/ #2 above]	2,392	Yes	Yes	Yes	Increase Bicycle Lane Miles/Square Mile ratio to 4- (currently 1.1) and install 5 roundabouts (quantification- duplicative of measure #2)
6. Transportation Demand Management	Facilitate commuter benefits programs, such as telecommuting, alternative work schedules, vanpooling, and bicycling facilities, in coordination with SANDAG, businesses, and developers	8,134	Yes	Yes	Yes	Alternate Work Schedule: Increase participation to 5%. Telecommuting: 10% of eligible telecommuters telecommute 2 days per week. Van Pooling: increase vanpool ridership to 3% and size to 10 people
7. Preferred Parking - Spaces	Designate preferred on- and off-street parking spaces for carpool and high efficiency/alternative fuel vehicles	5,266	Yes	Yes	Yes	Increase number of reserved spaces for EVs (or other high efficiency/alternative vehicles) to 10% (currently 0%)
8. Preferred Parking - Rates	Reduce parking rates in City-owned garages for high efficiency/alternative fuel vehicles	NA	Yes	No	Yes	Increase number of reserved spaces for EVs to 10% (currently 0%)
9. Synchronize Traffic Signals	Improve traffic flow by synchronizing all traffic signals along arterial roadways	1,418	Yes	Yes	Yes	Synchronize 25 traffic signals
10. Subsidized Transit Passes	Provide subsidized transit passes in the community	5,347	Yes	No	Yes	10% of labor force receiving a \$52 subsidy
Support Measures - Parking						
1	A comprehensive system of congestion pricing on all limited access highways and potentially non-highway arterials	NA	No	Yes	Yes	-----
2	"Un-bundle" housing and parking, so parking spaces require separate payment and are not included in rent/purchase price	NA	Yes	Yes	Yes	-----
3	Develop VMT reducing parking requirements for new developments	NA	Yes	Yes	Yes	-----
4	Develop new information technology to reduce 'cruising' for parking	NA	Yes	No	Yes	-----
5	Prohibit or reduce vehicle idling through an ordinance	NA	Yes	Yes	Yes	-----
6	Increase online permit services to minimize parking demand and trips for City-related business	NA	Yes	No	Yes	-----
7	Lower parking requirements for new developments, especially when linked to above-average transit service	NA	Yes	Yes	Yes	In high density "metro" areas
8	Establish parking maximums for new commercial, office, and industrial buildings	NA	Yes	Yes	Yes	In high density "metro" areas
9	Design and implement parking strategies to create disincentives for driving (especially for single-occupancy commuting)	NA	Yes	Yes	Yes	In high density "metro" areas

10	Tax unpaid off-street parking in commercial areas	NA	Yes	Yes	Yes	In high density "metro" areas
Support Measures - Efficient & Clean Vehicles						
1 [Current Action]	Expand educational campaigns and outreach to promote high fuel-efficiency and alternative vehicles	NA	Yes	Yes	Yes	-----
2 [Current Action]	Create additional publicly-available charging stations (through public-private partnerships) for electric and plug-in hybrid vehicles	NA	Yes	Yes	Yes	-----
3	Provide reduced parking fees and sales tax incentives for fuel-efficient vehicles	NA	Yes	No	Yes	-----
4	Streamline and provide assistance for EV charging station permitting	NA	Yes	Yes	Yes	-----
5	Pre-wire new residential and commercial buildings for EV chargers	NA	Yes	Yes	Yes	-----
Support Measures - Public Transit, Bicycling, Walking, & Others						
1 [Current Action]	Promote and facilitate public transportation, cycling, and walking as attractive alternatives to driving	NA	Yes	Yes	Yes	-----
2 [Current Action]	Promote and facilitate active transportation options for students (ex. bicycling & walking "trains" to school)	NA	Yes	Yes	Yes	-----
3 [Current Action]	Work with MTS to plan for Bus Rapid Transit service	NA	Yes	Yes	Yes	-----
4	Amend Growth Management Ordinance to opt for mobility choices over vehicle Level of Service (LOS) as suggested by CA recently	NA	Yes	Yes	Yes	-----
5	Designate a specific percentage of annual Capital Improvement Project funding to support active transportation infrastructure investments	NA	Yes	Yes	Yes	-----
6	Reclassify the #3 lanes on arterial roadway segments near freeways for "carpool only" during peak hours	NA	Yes	No	Yes	-----
7	Partner with transit providers to improve bicycle access on trains and buses	NA	Yes	Yes	Yes	-----
8	Increase user-friendliness of alternative modes of transportation	NA	Yes	Yes	Yes	-----
9	Expand and enhance public transit service offered throughout the City	NA	No	No	Yes	-----
10	Support SANDAG's "Guaranteed Ride Home" program in the community	NA	Yes	Yes	Yes	-----

11	Require that large employers offer telecommuting to their employees	NA	Yes	Yes	Yes	-----
12	Design an integrated short-route shuttle bus system to help customers access public transportation	NA	Yes	No	Yes	-----
13	Initiate universal fare cards and innovative payment methods to more easily allow multi-alternative transportation modes	NA	No	No	Yes	-----
14	Eliminate railway bottlenecks and improve the efficiencies of railway system to support freight movement	NA	Yes	No	Yes	-----

Support Measures - Land Use

1	Create incentives (non-monetary) to encourage mixed-use development near existing and planned transit corridors	NA	Yes	Yes	Yes	-----
2	Include transportation-related education materials in a "Welcome Package" for all new home buyers/renters	NA	Yes	Yes	Yes	-----
3	Provide incentives (non-monetary) for car-lite and car-free development in transit-served areas	NA	Yes	Yes	Yes	-----
4	Recruit more car-sharing and/or bike-sharing programs to offer service in community	NA	Yes	Yes	Yes	-----
5	Calibrate on-ramp metering for the I5 and I805 freeways to reduce wait times and idling	NA	No	Yes	Yes	-----
6	Work with SANDAG to accelerate the elimination of SR125 tolls to improve overall circulation network's efficiency	NA	Yes	Yes	Yes	-----

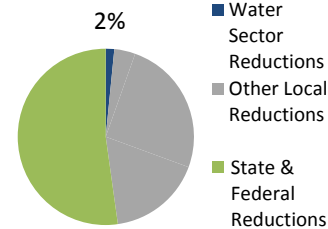
Initial Selection Criteria Definitions

<i>City Jurisdiction?</i>	This selection criteria evaluates whether a potential action is under the City's jurisdiction (i.e. can be influenced by its programs, policies, and codes).
<i>Fiscal Impact?</i>	This selection criteria evaluates whether a potential action would create a negative fiscal impact to the City's General Fund.
<i>Short Time Frame?</i>	This selection criteria evaluates whether the action could be implemented soon enough to positively impact the City's 2020 GHG emission levels.

2014 CAP UPDATE - Water Sector Planning Matrix

Example Strategies	Jurisdiction
Reduce per capita water use by 20%	San Diego County
Reduce daily per capita water consumption by 4 gallons by 2020 (9 gallons by 2035)	San Diego
Increase the use of recycled water by 30% by 2020 from 2008 levels	Riverside
Reduce per capita water consumption by 33% from 2006 levels	Vancouver
Reduce water demand by 200,000 gallons per day by 2015	Santa Monica

Greenhouse Gas Emission Reductions



Assuming all sectors reduce equally, the Water Sector's 2020 reduction target would be:

5,920 MT CO₂e

To meet this goal, the community would need to reduce water consumption by:

**1,283 acre feet/yr or
6 gal/day per capita reduction or
5% per capita reduction**

For reference:

- Low flow fixtures can save 2.2 gal/min
- Fixing a leak can save 20 to 50 gal/day
- New clothes washer can save 25 gal/load

Example Actions		Emission Reductions (MT Co ₂ e)	City Jurisdiction?	Fiscal Impact?	Short Time Frame?	Assumptions
Quantified Measures						
1. Water-Saving Devices [Current Action]	Distribute water-saving devices such as faucet aerators & shower heads	141	Yes	Yes	Yes	Distribute 1,000 low-flow shower heads and 3,000 low flow faucet aerators (can replace w/ comparable measures, if needed)
2. Water Billing Structure	Change water rate and billing structure to promote water conservation	1,367	No	Yes	Yes	Increase water rates by 50%
3. Water Abuse Fines	Levy fines and sanctions against water abusers in community	44	Yes	Yes	Yes	Assumes 10% of water users will receive fines equivalent to 15% of annual bill (only accounting for increased cost not impact of higher awareness)
4. Landscape Water Conservation Ordinance	Revise Landscape Water Conservation Ordinance to further promote water efficient landscape design (especially native plant & weather-based irrigation controller use)	514	Yes	Yes	Yes	Reduce water consumption by 27 gal/day
5. Water Retrofit Ordinances	Develop a residential & commercial water conservation ordinance requiring upgrades at a point in time	304	Yes	Yes	Yes	Reduce indoor water consumption in 2% of total residential sqft by 20%,

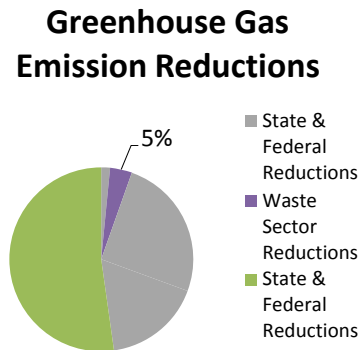
6. On-site Wastewater Reclamation	Pursue on-site wastewater reclamation for larger development projects	599	Yes	No	Yes	Re-use/reclaim 62,234 gal of water (5% of City Hall indoor usage)
Support Measures - Water Conservation						
1 [Current Action]	Distribute outreach materials and host workshops to educate the community on water conservation	NA	Yes	Yes	Yes	Education materials distributed at weekly community events and 3 workshops hosted per year
2 [Current Action]	Require free energy and water evaluations for businesses thru business licensing	NA	Yes	Yes	Yes	~600 evaluations annually
3 [Current Action]	Provide free energy and water evaluations for homes	NA	Yes	Yes	Yes	~150 evaluations annually
4 [Current Action]	Certify landscaping areas as "NatureScapes" based on their water efficiency and sustainability	NA	Yes	Yes	Yes	~100 certifications annually
5 [Current Action]	Provide water efficiency upgrade financing for property-owners through a PACE program	NA	Yes	Yes	Yes	Applications currently being accepted and financing should occur in July
6 [Current Action]	Provide a Green Building incentive program that rewards developers with expedited permitting	NA	Yes	Yes	Yes	Zero participants to date
7 [Current Action]	Update Landscape Water Conservation Ordinance to emphasize water use efficiency and reuse	NA	Yes	Yes	Yes	Updated in January 2010
8	Adopt water efficiency principles similar to the Ahwahnee Water Principles	NA	Yes	Yes	Yes	-----
9	Promote free water audit programs in collaboration with efforts by local water districts	NA	Yes	Yes	Yes	-----
10	Host water efficiency trainings (with certifications) for landscape designers & architects, irrigation installers, and property managers	NA	Yes	Yes	Yes	-----
11	Use water conservation displays & gardens to demonstrate and promote water conservation principles	NA	Yes	No	Yes	-----
12	Train volunteers to provide door-to-door residential water surveys to targeted areas of the community	NA	Yes	Yes	Yes	-----
13	Incorporate CalGreen Tier 1 Water Efficiency retrofits into rental housing with tenant turnover	NA	Yes	Yes	Yes	-----
14	Enforce irrigation time restrictions and overwatering	NA	Yes	Yes	Yes	-----
15	Encourage regional water conservation measures and programs	NA	Yes	Yes	Yes	-----

16	Use sewer ratepayer funds to incentivize indoor water conservation	NA	Yes	Yes	Yes	-----
17	Create on-bill financing to support indoor water conservation that can be applied to sewer bills	NA	Yes	Yes	Yes	-----
18	Create incentives for water-saving appliances, irrigation, & plants	NA	Yes	No	Yes	-----
19	Integrate enhanced water conservation measures into a required Green Building Standard	NA	Yes	Yes	Yes	-----
20	Broaden when water efficient plumbing upgrades are triggered by building permit issuance (per AB407)	NA	Yes	Yes	Yes	-----
Support Measures - Water Reuse						
1 [Current Action]	Distribute outreach materials and host workshops to educate the community on water reuse	NA	Yes	Yes	Yes	Education materials distributed at weekly community events and 3 workshops hosted per year
2 [Current Action]	Pre-plumb new residential units (single-family & duplexes) for Laundry-to-Landscape systems	NA	Yes	Yes	Yes	Adopted in May 2013
3 [Current Action]	Develop standards for indoor recycled water use (commercial only)	NA	Yes	Yes	Yes	Not implemented yet
4 [Current Action]	Initiate a storm water reuse pilot project at a municipal site	NA	Yes	No	Yes	Not implemented yet
5	Initiate a program to help install Laundry-to-Landscape systems at residences	NA	Yes	No	Yes	-----
6	Develop standards that facilitate (complex) graywater system use	NA	Yes	Yes	Yes	-----
7	Develop standards for composting toilet installations	NA	Yes	Yes	Yes	-----
8	Incorporate storm water capture and reuse into municipal capital projects	NA	Yes	No	Yes	-----
9	Identify new uses for existing, unused reclaimed water	NA	Yes	Yes	Yes	-----
10	Develop a Recycled Water or Water Reuse Master Plan to ensure maximum utilization of the drought-resistant supplies	NA	Yes	Yes	Yes	-----
11	Increase the use of reclaimed water from Wastewater Treatment Plants for direct or indirect reuse	NA	No	Yes	Yes	-----
12	Provide 100% of water from local sources	NA	No	No	Yes	-----

13	Audit water/wastewater pumps and replace least efficient pumps	NA	Yes	Yes	Yes	[ADD TOOL DEFAULT OR OTHER VALUES]
Initial Selection Criteria Definitions						
City Jurisdiction?	This selection criteria evaluates whether a potential action is under the City's jurisdiction (i.e. can be influenced by its programs, policies, and codes).					
Fiscal Impact?	This selection criteria evaluates whether a potential action would create a negative fiscal impact to the City's General Fund.					
Short Time Frame?	This selection criteria evaluates whether the action could be implemented soon enough to positively impact the City's 2020 GHG emission levels.					

2014 CAP UPDATE - Solid Waste & Wastewater Sector Planning Matrix

Example Strategies	Jurisdiction
Achieve zero waste to landfills through recycling and composting	San Francisco County
Increase diversion rate to 75% by 2020, and Zero Waste by 2040 (draft)	San Diego
Reduce waste, based on the 2007 per capita baseline, by 75% by 2020	Riverside
Reduce solid waste going to the landfill or incinerator by 50% from 2008 levels	Vancouver
Divert 80% of solid waste from landfill	Santa Monica



Assuming all sectors reduce equally, the Waste Sector's 2020 reduction target would be:

15,058 MT CO₂e

To meet this goal, the community would need to reduce waste consumption by:

**31,828 ton/yr & 4 MG/yr or
.8 lb/day & 12 gal. per capita reduction or
20% per capita reduction**

For reference:

- Current solid waste rate is 3.5 lbs/day
- About 50% of landfilled waste is organics
- Installing HE toilets can save 35 gal/day

Example Actions		Emission Reductions (MT Co2e)	City Jurisdiction?	Fiscal Impact?	Short Time Frame?	Assumptions
Quantified Measures						
1. Zero Waste Plan	Implement a Zero Waste Plan in order to eventually divert most waste from landfill	32,026	Yes	Yes	Yes	75% diversion rate by 2020 and a 95% rate by 2035
Support Measures - Recycling						
1 [Current Action]	Provide outreach and education (ex. classes) about recycling	NA	Yes	Yes	Yes	-----
2 [Current Action]	Work with waste haulers to reduce emissions from vehicle fleet	NA	Yes	Yes	Yes	-----
3 [Current Action]	Update solid waste disposal billing rates to incentivize recycling	NA	Yes	Yes	Yes	-----
4 [Current Action]	Encourage the development of a local recycled materials market (ex. Recycling Market Development Zone)	NA	Yes	Yes	Yes	-----
5	Strengthen enforcement of new commercial recycling regulations	NA	Yes	Yes	Yes	-----
6	Develop a "Zero Waste Certification" program for businesses	NA	Yes	Yes	Yes	-----

7	Require City-financed projects to meet a higher waste reduction and/or recycling standard	NA	Yes	Yes	Yes	-----
8	Provide more public recycling containers on commercial corridors and in parks/public places	NA	Yes	Yes	Yes	-----
9	Ensure that all public events offer recycling & composting opportunities (eventually transition to Zero Waste events)	NA	Yes	Yes	Yes	-----
10	Expand the types of materials that are collected for recycling	NA	Yes	Yes	Yes	-----
11	Develop partnerships to recycle HFCs (Hydro-fluorocarbons) from discarded appliances	NA	Yes	Yes	Yes	-----
Support Measures - Source Reduction & Reuse						
1 [Current Action]	Adopt/update a Construction and Demolition Ordinance	NA	Yes	Yes	Yes	-----
2 [Current Action]	Institute post-collection sorting for municipal solid waste	NA	Yes	Yes	Yes	-----
3 [Current Action]	Educate public about opt-out opportunities for materials like phone books and junk mail	NA	Yes	Yes	Yes	-----
4 [Current Action]	Promote and encourage paperless billing and payment options	NA	Yes	Yes	Yes	-----
5 [Current Action]	Encourage and pilot "paperless" operations for select city processes	NA	Yes	Yes	Yes	-----
6 [Current Action]	Promote Extended Producer Responsibility policies	NA	Yes	Yes	Yes	-----
7	Provide grants for sharing co-ops and lending libraries	NA	Yes	Yes	Yes	-----
8	Develop educational materials that illustrate the emissions impacts of common products or behaviors	NA	Yes	Yes	Yes	-----
9	Clearly label trash cans and other garbage receptacles as "landfill"	NA	Yes	Yes	Yes	-----
10	Decrease use of disposable products by conducting upstream waste prevention campaigns	NA	Yes	Yes	Yes	-----
11	Ban single use bags	NA	Yes	Yes	Yes	-----
12	Ban non-recyclable/compostable, single-use food takeout containers	NA	Yes	Yes	Yes	-----

13	Limit the use of single-use plastic beverage bottles in municipal buildings and events	NA	Yes	Yes	Yes	-----
14	Ban certain construction and demolition waste from job sites and private transfer stations	NA	Yes	Yes	Yes	-----
15	Develop a process that takes apart buildings to salvage materials, rather than traditional demolition method	NA	Yes	Yes	Yes	-----
16	Promote and develop training programs for deconstruction and reuse of buildings	NA	Yes	Yes	Yes	-----
Support Measures - Organics						
1 [Current Action]	Pilot curbside collection for food waste	NA	Yes	Yes	Yes	-----
2 [Current Action]	Provide discounted compost receptacles	NA	Yes	Yes	Yes	-----
3	Identify major organic waste producers and conduct a targeted campaign to increase organics recycling	NA	Yes	Yes	Yes	-----
4	Provide citywide curbside collection for food waste	NA	Yes	Yes	Yes	-----
5	Increase methane capture rate at Otay Landfill	NA	No	Yes	Yes	-----
6	Develop a resource recovery center at Otay Landfill	NA	No	Yes	Yes	-----
7	Develop facilities that will convert solid waste to energy (without incineration)	NA	Yes	Yes	Yes	-----
8	Expand options for diverting lumber from the Otay Landfill	NA	Yes	Yes	Yes	-----
Support Measures - Wastewater						
1 [Current Action]	Support water conservation educational programs	NA	Yes	Yes	Yes	-----
2	Incorporate CalGreen Tier 1 Water Efficiency retrofits into rental housing with tenant turnover	NA	Yes	Yes	Yes	-----
3	Simplify municipal permitting and review for complex graywater systems	NA	Yes	Yes	Yes	-----
4	Use sewer ratepayer funds to incentivize indoor water conservation	NA	Yes	Yes	Yes	-----

5	Create on-bill financing to support indoor water conservation that can be applied to sewer bills	NA	Yes	Yes	Yes	-----
6	Increase the capture rate of methane from wastewater treatment	NA	No	Yes	Yes	-----

Initial Selection Criteria Definitions						
<i>City Jurisdiction?</i>	This selection criteria evaluates whether a potential action is under the City's jurisdiction (i.e. can be influenced by its programs, policies, and codes).					
<i>Fiscal Impact?</i>	This selection criteria evaluates whether a potential action would create a negative fiscal impact to the City's General Fund.					
<i>Short Time Frame?</i>	This selection criteria evaluates whether the action could be implemented soon enough to positively impact the City's 2020 GHG emission levels.					